

Correspondence

TO THE EDITOR, *British Journal of Venereal Diseases*

Inhibition of gonococci by a selective medium: disparity between isolates from sexual partners

Sir,

A proportion of clinical isolates of *Neisseria gonorrhoeae* fail to grow on selective medium containing vancomycin, colistin, nystatin, and trimethoprim (VCNT). Reyn and Bentzon (1972) and Brorson *et al.* (1973) reported the isolation frequency of these strains to be about 4% and 10% respectively and found vancomycin to be the inhibitory component. The sensitivity of these strains to vancomycin has been attributed to env mutations which result in phenotypic hypersensitivity to antibiotics including vancomycin (Sparling *et al.*, 1976). Observations in this department suggest that other mechanisms may also be involved in the inhibition of certain gonococcal isolates by vancomycin.

The isolation and identification of gonococci have been previously described (Platt, 1976a). Ready-poured bi-plates, containing GC selective medium (VCNT) and GC non-selective medium, were obtained from Gibco-Biocult (Paisley, Scotland) and each batch was quantitatively quality-controlled to ensure consistent inhibitory activity. The isolation frequency of VCNT-sensitive gonococci remained constant at between 4% and 6%.

Gonococci were isolated from 32 patients attending the department of genitourinary medicine at the West London Hospital. From four (25%) patients and their respective sexual partners gonococci were isolated which grew on non-selective medium but failed to grow on selective medium on both primary isolation and subsequent subculture. Gonococci isolated from a further 12 patients failed to grow on selective medium on primary isolation; of these six were male and six were female.

On subculture each of five isolates tested produced colonies on selective medium which were similar in size and number to a control plate lacking VCNT. The gonococci isolated from each of the 12 sexual partners grew well on selective medium on primary isolation.

Reyn and Bentzon (1972) found that about 40% of strains, inhibited by vancomycin on primary isolation, were capable of growth on subculture if a heavy inoculum was used, and they attributed this result to random variation in the original inocula and a 'training effect' during laboratory subculture. The high proportion (75%) of disparate vancomycin sensitivity between sexual partners on primary isolation and the resistance of the vancomycin-sensitive isolates on subsequent subculture suggests that an alternative mechanism is involved.

Although env mutations have been demonstrated in clinical isolates of *N. gonorrhoeae* (Eisenstein and Sparling, 1978), for vancomycin sensitivity to be solely under env control would require both isolates from sexual partners to exhibit similar sensitivity to VCNT. The results obtained from four pairs of patients are compatible with this hypothesis. The disparate results obtained with 24 paired isolates may be explained as a function of the physiological state of the organism *in vivo*. For many organisms the immediate history of an inoculum affects the response to inhibitors (Farwell and Brown, 1971; Brown, 1977). The physiological state of gonococci determines their response to CO₂ deprivation (Platt, 1976b). Thus it seems likely that the physiological state of gonococci *in vivo* may predispose certain strains to vancomycin sensitivity on primary isolation.

Yours faithfully,
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TO THE EDITOR, *British Journal of Venereal Diseases*

Treatment of condyloma acuminatum with 5% 5-fluorouracil

Sir,

Podophyllin is still widely used in the treatment of condyloma acuminatum since its introduction in 1944, but the results are poor especially with multiple condylomata acuminata, when local side effects may be troublesome. Good results were obtained with 5-fluorouracil cream in the treatment of genital warts and the side effects were minimal (Handojo and Pardjono, 1973; Hayes, 1974; Dretler and Klein, 1975; Von Krogh, 1976). It was decided to see whether the results reported by these authors could be confirmed.

All men with condylomata acuminata were treated with 5% 5-fluorouracil cream until the condylomata were eradicated, usually after three to seven days. Patients were seen weekly for four weeks and followed up for three months. At each visit the distribution, number, and size of the warts were assessed and side effects recorded.

Forty-one male patients aged 15 to 39 years with condylomata acuminata of 15 to 60 days' duration, some of whom